

ABSTRACT

A channel coding device is disclosed. In the device, a bit inserter inserts known bits in an input data bit stream at predetermined positions. A channel coder codes the bit-inserted data bit stream to generate coded symbols. A rate matcher matches a rate of the coded symbols to a given channel symbol rate. A channel interleaver interleaves the rate matched channel symbols. The rate matcher includes a puncturer for puncturing the inserted known bits included in the coded symbols when the coded symbol rate is higher than the given channel symbol rate. The rate matcher includes a repeater for repeating the coded symbols to match the coded symbol rate to the given channel symbol rate when the coded symbol rate is lower than the given channel symbol rate.

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